Performance Measurement and Accountability in an Australian Fire Service

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Abstract
New Public Management (NPM) techniques have been widely adopted in Australian public sector organisations. NPM stresses the concept of accountability, and in this context reporting mechanisms are important. All government and semi-government authorities provide annual reports, but the usefulness of these annual reports in assessing operational and financial performance is open to question. We ask what performance measures are important in the context of the provision of fire services. The study evaluates annual reports of fire services to determine operational and financial performance in the Australian state of Victoria, which has four different models of fire service provision in three different fire service organisations.

The study finds that annual reports are based on financial results, some basic performance measures and narrative describing some operational results. External stakeholders are well served by the financial reports, but find difficulty in assessing operational performance trends and comparative operational performance from these reports. It is difficult to assess the relative performance outcomes of the three different organisations. Few operational indicators are published, despite prior problems in fire services which have lead to parliamentary enquiries. The lack of useful performance measures impacts negatively on the demonstration of accountability to external stakeholders.

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Introduction
Many government jurisdictions worldwide have adopted New Public Management (NPM) techniques to reform and their public authorities and make them more efficient and more accountable. NPM has been widely adopted in the Australian public sector, at Federal, State and Local government levels. Accountability has been recognised as an issue in privatised and corporatised public entities, and in semi-autonomous public authorities. The benefits of NPM are said to be greater accountability, transparency, and resource efficiency (Brown et al 2003). However, there are many issues in NPM which are still contentious. What is accountability in an increasingly corporatised public sector? For what are public sector entities accountable? Is accountability limited to fiduciary accountability, or are there other accountabilities? If we can define accountability, how can we measure and report on it? This paper examines how accountability is discharged in one public arena – the fire services in Victoria, Australia.

Accountability
Accountability in the public sector is increasingly difficult to define, but is fundamental to our system of government. Accountability as a concept has moved from traditional notions of compliance to notions of performance. Accountability takes many forms. Stewart (1984) and Broadbent et al (1996) discuss accountability in terms of a ladder. At the lowest level, accountability for probity examines if funds have been used in an appropriate manner. Process accountability ensures due process is followed. Performance accountability examines work program outcomes in terms of goals; and policy accountability accounts for outcomes in broad policy terms and is the highest level (Kloot and Martin 2001). Accountability has moved from a narrow focus on financial accountability to the broader notion of management accountability through the use of performance measurement and performance reporting (Tilbury 2006). Public sector accountability has over time shifted from an internally focussed accountability to parliament and government oversight bodies to a more externally focussed accountability concept towards a range of external stakeholders such as users of public services and the general community (Parker and Gould 1999).

Financial reporting has been the focus of much of the NPM reforms in Australia. (Kloot 2006) The adoption of accrual accounting has been seen by some as a panacea to increase transparency and accountability in the public sector, albeit a limited view of accountability as being related to the efficient use of resources and better resource allocation (Carlin 2005).

Performance reporting and performance measurement can provide both internal and external accountability and thus potentially gives voice to a greater range of stakeholders. Performance indicators over a range of outcomes, not just financial, can open up areas for debate by highlighting concerns and prioritising areas for action. This requires links between performance improvements and specific policy goals, else accountability is undermined (Tilbury 2006).

Benchmarking
One of the most important practices used in developing a more efficient public sector is benchmarking. Benchmarking can involve internal comparisons between units in an...
entity, or industry benchmarking across similar entities with similar responsibilities. Benchmarking in the public sector is consistent with notions of continuous improvement, measurement against a referent other and rigour (Magd and Curry 2003). Benchmarks establish a quantifiable level of performance to be achieved (Tilbury 2006) and require an organisation to identify examples of good practice, monitor progress in making improvements to mimic good practice against the leaders in the field, Benchmarking also requires reviewing services to bring about continuous improvement (Magd and Curry 2003, Bowerman et al 2002). It is a process for measuring performance against the best in class, then analysing the information gained to surpass best in class (Voss et al 1997). Benchmarking has been described as a vital part of the learning organisation, leading to higher performance (Voss et al 1997).

Many different aspects of management processes can be benchmarked, such as critical success factors, the processes causing most trouble, and the processes that contribute to customer satisfaction (Cassell et al 2001). In addition to processes, data such as performance reports, functions, strategic approaches and initiatives can all be benchmarked. In the public sector, benchmarking tends to take place through the use of statistical or data comparison (Bowerman et al 2002). This has led to a concentration on measurable results, with outcomes, often difficult to define and measure, being perceived as of secondary importance. It can encourage uniform standards of performance, rather than using benchmarking to improve performance (Bowerman et al 2002). However, benchmarking can impart knowledge relevant to NPM and to performance improvement.

Benchmarking is important for accountability. It can be seen as a form of evaluation for accountability, with the prospect of improved quality of outputs (Bowerman et al 2002). If organisations can demonstrate that they are at or near ‘good’ levels of performance they will have acquitted their accountability obligations (Bowerman et al 2002). Benchmarking in the public sector, when intertwined with public sector notions of accountability, can become the means to better performance. The Victorian state government has for example introduced compulsory benchmarking across the local government sector to inform CEOs and improve sector-wide performance (Kloot 2006). Benchmarking across organisations can reasonably be expected to assist in identifying best practice and lifting performance across the services.

**Reporting processes**

All government and semi-government authorities provide annual reports to parliament, and there are often extremely busy periods when these reports are presented to parliament.\(^1\) Annual reports are the formal discharge of accountability to the public – but how useful are they in assessing both operational and financial performance? Do the reports allow for the broader notions of performance and policy accountability, or do they maintain the narrow focus on probity and financial accountability? Can the public use the reports to compare the outcomes (benchmark) between departments within the state, and between similar departments in other states or even other countries? If the reports can be used to compare outcomes, are the

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\(^1\) Just prior to the rising of the Victorian Parliament before the November 2006 elections, 230 departmental and other annual reports were presented to Parliament in one week.
outcomes upon they report those which best allow stakeholders to assess accountability?

This research was undertaken to highlight the needs of one specific service: the fire service. Over the summer of 2006/2007, drought, high temperatures, and other environmental factors contributed to a long and severe fire season. Significant fires burned over long periods in the south east of Australia, particularly in the state of Victoria. There was significant loss of national parks, farming areas (the losses include pastures, fences, farm equipment and sheds, housing) and homes in some remote areas. There was also some loss of life. Who was accountable for fighting these fires, for the activities which could assist in fire prevention, and for the economic losses associated with these fires? How can the public assess the accountabilities of various interested groups? This paper attempts to answer some of these questions.

We build on Carvalho et al’s 2006 paper to add a third jurisdiction to their international comparison of fire service performance measurement. Carvalho et al (2006) noted that UK fires services had a range of KPIs, in contrast to Portuguese fire services, which have none. In Portugal, neither financial nor operational KPIs were available. Carvalho et al further noted differences between Scotland and England and Wales. In Scotland, there are limited numbers of KPIs (8) relating to response times, sickness absence, and community fire safety. In England and Wales there are 28 Best Value indicators relating to service delivery and corporate health: the 25 KPIs relating to call responsiveness, fire safety and costs have been discontinued since 2002/2003.

In this research, we try to establish what performance measures are important in the provision of fire services in the Australian state of Victoria. The state of Victoria has a history of following NPM advances developed in the UK. Victorian local government was required to adopt CCT, following the UK experience, and Best Value, again following the UK experience. Many NPM practices have been borrowed from the UK at the state and local levels. We would expect there to be some commonality between the Victorian fire service performance measures and those in the UK.

**Context**

This study is set in the context of fire services provision in the Australian state of Victoria, which has four different models of fire service provision, and involves the study of annual reports of the different providers in an effort to determine both operational and financial performance outcomes.

Fire services are one of the emergency management services, which have as their overarching objectives to (1) reduce the adverse effects of emergencies and disasters on the community (on people, property, infrastructure, economy and environment); (2) to manage risks to the community and (3) enhance public safety (Productivity Commission 2006). Fire services organisations are involved in: developing building fire safety codes and inspecting fire safety equipment and practices; training and educating the community to achieve community awareness and behavioural change in relation to fire safety and road safety issues; assisting individuals and communities to prepare for bushfires; responding to structure, bush, vehicle and other fires; providing rural land management advice on the role and use of fire; providing road accident rescue and other rescue services; managing hazardous material incidents; administering legislation relating to fire safety, hazardous materials facilities and
hazard mitigation. Fire services also work closely with volunteer emergency services organisations, police and ambulance services to assist the community in emergency management.

**Fire services in the Australian state of Victoria.**

Victoria has a population of approximately 5 million people, with about 3.6 million of them concentrated in the capital city of Melbourne, the nation’s second largest city (DSE 2007). The remaining 1.4 million live in several large regional cities, in regional and rural towns, and in rural and remote areas. The structure of the firefighting services in Victoria is relatively complex. There are three different service providers using four different service models in the fire service in Victoria, with some overlapping responsibilities. There are now agreements and joint operating committees in place to attempt to maximise efficiency and minimise problems of coordinating multiple models and providers. Victoria separates its fire services by geographic region, not by service function.

**Melbourne Metropolitan area**

In metropolitan Melbourne, those suburbs which have been part of the city for about the last 50 years are covered by a fully professional fire service, the Metropolitan Fire and Emergency Services Board (MFB). The MFB area covers some 2.2 million people. Some suburbs which are now part of metropolitan Melbourne, and have been so for 30 years or more, but which were once outside the limits of greater Melbourne, are covered by the Country Fire Authority (CFA), which is a partly professional and partly volunteer organisation. The CFA covers 1 million people in Greater Melbourne. Most of those areas now within greater Melbourne have services provided by professional officers, but some are covered by smaller crews of professional officers and volunteer fire-fighters who are called on only when a fire or other emergency occurs. The population growth in outer-urban Melbourne has created problems for the CFA as inner-urban residents migrate to the outer suburbs and expect that their fire stations are manned by a fully professional force. New residents are often unaware that the service in outer areas relies on volunteers to make up the numbers (Egan 2006). A Joint Coordinating Committee with members from both the MFB and the CFA oversees joint activities between the two services. Joint activities can pose significant problems: hose fittings on trucks designed to operate on fire hydrants in MFB areas do not fit hydrants in CFA areas, and vice-versa. Until recently the emergency communication networks were not always compatible.

**Regional and rural cities and large towns**

In regional and large rural cities, the CFA operates with a staff of professional fire-fighters and volunteers who attend fires and emergencies. Typically, a 10 (day) or 14 (night) hour shift will consist of anywhere from one (small stations) to seven (larger station) professional fire-fighters who attend call-outs. Central fire communications will notify a station of a fire, and pages the volunteer force. If the shift has more than one professional fire-fighter, the response time is to be no more than 90 seconds. The volunteers have 4 minutes to respond, and will attend the fire with as many or as few volunteers who have responded to the page. Volunteers who miss the 4-minute

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2 The other six states use similar models for their services.
deadline may bring further appliances to the fire if they respond. The professional fire fighters also undertake other duties such as inspection of premises for fire safety, etc.

Rural and remote areas
In rural and remote areas, the CFA operates as a fully volunteer organisation, with volunteers who train anywhere from a weekly basis to a quarterly in remote areas. The volunteers attend incidents in their local areas as required. The local brigade captain and the volunteers are paged from central communications which manages all fire call taking. For large fires, CFA brigades from outside the local area may also be called on to act.

The CFA provides fire services to one million people in greater Melbourne and 1.6 million people in the rest of the state. It has over 1200 brigades across the state, organised into 142 groups. 98% of the CFA’s members, or 58,000 people, are volunteers. Volunteers often have to leave their jobs at short notice to fight fires, and a large fire may see them on voluntary duty for some days. The cooperation of their employers is vital for the functioning of the CFA.

National parks
The Department of Sustainability and Environment (DSE) also has fire-fighting capabilities for fires on public lands, such as in National Parks. The Department employs permanent fire-fighter, seasonal fire-fighters for the summer bush-fire danger period, and season fire specialists for the pre-season fire preparedness that needs to be undertaken to reduce fuel and the likelihood of fires on public land. In large bushfires which are on or bordering national parks, both DSE and CFA units are likely to be jointly engaged in fighting fires.

<table>
<thead>
<tr>
<th>Table 1 Fire services in Victoria, June 2006</th>
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<tr>
<td>Organisation</td>
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<tr>
<td>Nature</td>
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<tr>
<td>Total funding</td>
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<tr>
<td>Funds from insurance levy</td>
</tr>
<tr>
<td>Number of brigades</td>
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<tr>
<td>Number of Firefighters</td>
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<tr>
<td>Administration and Support employees</td>
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</tbody>
</table>

In terms of firefighter numbers, the CFA is the largest organisation when the professional workforce and the volunteers are combined, followed by MFB. DSE,
although a large department overall, has a small firefighting entity with limited responsibilities.

**Fire services revenue**
Both MFB and CFA receive revenue from several sources, whilst DSE as a government department receives funding through a budget allocation from state parliament. MFB and CFA revenue sources are: a levy on insurance premiums for insured properties which is paid by insurance companies which is the primary source of their funding; revenue from the state government through a budget allocation (about 10% for MFB and 22% for CFA); user charges (attending fires for uninsured premises); some small federal government funding; sales of goods and services such as external training services, alarm monitoring, hazardous materials incidents; revenue received from municipalities for MFB; and public donations and fund raising for the CFA.

**Problems and issues in fire services in Victoria**
Problems which have arisen in the past are largely related to rural and regional fires in open country and in forests and national parks – bushfires as they are known in Australia.

**Equipment failures and volunteer deaths in CFA**
In those areas where it is a fully volunteer organisation with volunteer brigades, the CFA needs to raise funds to purchase equipment. At times a lack of funds leads to outdated equipment failing at crucial points, resulting in volunteer deaths. For a small rural area the loss of six volunteers in a truck burn-over, which has happened, is devastating for the entire community.

**Lack of compatibility of systems between MFB and CFA**
Due to past history, the fittings on trucks and appliances are not always compatible with fittings on water sources if MFB or CFA appliances move into each other’s areas when fighting large fires. However, a Joint Coordinating Committee has been established to better facilitate joint work, and there is considerable goodwill and a desire for the two services to improve their joint operations.

**Fire prevention which causes fires**
Fuel reduction burns are undertaken to clear dry undergrowth in forest areas, to clear along fence lines on farms and generally to reduce the impact of any fires which do occur. There have been incidences of officially sanctioned and planned burns suddenly flaring into uncontrollable fires.

**Large fires burning out of control**
In 2002-2003, fires burned out of control over large areas of Victoria, starting with 80 fires in the east of the state 7 and 8 January which burned and joined with other fires until declared contained on 7 March. 1.012 million hectares of land in national parks, and 108,000 hectares of farm land and houses were burned. In the north-west of the state, 181,400 hectares were burned in December 2002. Other fires raged over other areas for some weeks. This season’s fires resulted in a parliamentary enquiry into preparations for and response to fires in rural areas.
**Research method**

This study is conducted through an examination of publicly available 2006 annual reports of the three firefighting services. The annual reports are used as these are the primary data source for those interested in the performance of the fire services. 2006 reports are used as previous reports would not have reflected the recommendations made by the enquiry into bushfires following the disastrous fires of the 2002-2003 bushfire season. Following those 2002-2003 fires, the parliamentary enquiry made numerous and substantial recommendations. By 2006, those recommendations should have been incorporated into the operations and hence the annual reports of the MFB, the CFA and DSE. In addition, the Emergency Management report of the Productivity Commission was examined to determine common benchmarks across the Australian fire services sector. Common reporting benchmarks have been designed by the Productivity Commission, and this research was designed to analyse individual reports against those benchmarks, and other benchmarks set in other jurisdictions.

**Findings**

The question we wanted to answer was whether the annual reports of the various fires services were sufficient in breadth and depth to demonstrate accountability for fire service outcomes to various stakeholders.

The reports were largely based on financial results plus some narrative around some operational results. The financial reports show good financial management, with both MFB and CFA recording operating surpluses. The reports are consistent with a focus on accountability as a financial construct, and far less focus on operational accountability: we would call this outcomes accountability. as the financial reports are all of appropriate standard showing good financial stewardship, the analysis concentrates on the operational aspect of the reports. External stakeholders – the public – would experience considerable difficulty in assessing operational performance from these reports. Few operational indicators are published, although they are used by line managers and fire station managers. Overall, the results from an operational perspective were disappointing.

**MFB report**

The MFB report is 84 pages, of which 7 pages are devoted to corporate governance and 43 pages to financial results. The operational report contains emergency response statistics – all over a four year period, and with a long term average: number of turnouts; response times in minutes; number of calls by local government area within the MFB catchment area; containment of fires to room of origin; emergency medical response ‘save’; preventable fire fatalities; breakdown of calls by type (fires, hazardous conditions, rescues, service calls, false alarms). The performance indicators are useful in gauging trends and outcomes expected of a metropolitan fire service. However, there is little basis for comparison with CFA or other interstate fire services of comparable complexity. The report contains a narrative review of operations under various heading including joint operations with CFA, staff issues, risk based community planing, and several case studies on important operational issues.

Overall there are some performance measures which can be used to judge the operations and outcomes of the MFB, but the majority of the report is devoted to financial reports and financial issues. In terms of financial accountability, the report
provides a strong review of financial position and performance. In terms of performance accountability, there is still some way to go.

CFA report
The CFA report is 77 pages, with 9 pages devoted to corporate governance and 28 pages to financial results (5 pages in an easy-to-read summary and 23 pages of statutory financial reports). Operational performance statistics include: days of total fire bans\(^3\) over four years, and details of the days in the current year; total incidents by category over six years (fires, rescues, hazardous conditions, service calls, false alarms); number of turnouts over six years; a list of major incidents for the year; number of Community Fireguard meetings\(^4\) over 12 years, and number of Community Fireguard groups over six years. There are also indicators of human resource management: number of volunteer and professional fire-fighters over six years; number of qualified personnel in various categories; compensation and workcover claims. Finally, lists of firefighting appliances by category, and notes of other assets such as land and buildings are provided.

There is a note that service delivery standards were met 89% of the time, below the 90% benchmark, but no discussion of what these standards are. It is also noted that new software will monitor brigade efficiency, but brigade efficiency is neither defined nor discussed. Again, financial accountability is well discharged, but there is little information on which to judge performance accountability. There is an almost total lack of ability to judge CFA’s performance compared to DSE in Victoria, or other comparable fire services interstate.

DSE report
The DSE has some 50 portfolio agencies covering the environment, water management, planning and urban development, public land management (forests, coats, alpine resorts, crown land, and parks) and conservation. With such broad responsibilities, it is perhaps not surprising that the report on fire prevention and fire issues was less than three pages in a 237 page annual report. The report consisted of a narrative relating to

1. Prevention measures: the Code of Practice for Fire Management on Public Land; capital improvement work designed to reduce fire risk; fire ecology planning framework
2. Fire operations, largely narrative but included the number of fires on public land for this period (739); the total hectares burned (188,824 hectares, of which 108,400 was public land); the number of fire calls in one day (2500) and brief details of some major fires
3. Fuel reduction measures (a total of 49,000 hectares burned for fuel reduction).

Given the scope of the fires that have taken place in previous years, it was expected that some comparators would be given, however the report for 2006 was presented with no previous figures for comparison. There is no way for users of the report to understand if the results are good or bad in trend terms, or in terms of comparable

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\(^3\) A total fireban occurs when the risk of bushfire is so high that fires in the open air are totally banned in part or all of the state.

\(^4\) Community Fireguard meetings relate to the provision of information about current fires and a broad range of safety information to community groups.
situations in other states or other countries, or even compared to CFA figures. Neither financial nor performance accountability needs are satisfied by this report.

Productivity Commission
A further source of information about fire services across Australia, which discloses figures by state but not by service within each state, is the Australian Government Productivity Commission’s report on emergency management. The Productivity Commission reports on a general performance indicator framework for emergency management, and has specific KPIs for fire services. The framework uses the following groups of KPIs:

Output measures
*Prevention and mitigation*: the level of safe fire practices in the community. Selected strategies include the proportion of households with a fire safety measure installed; the inspection of property for hazards, the level of compliance with standards and building codes
*Preparedness*: the proportion of residential households with smoke alarms (note: this is very similar to the first KPI), the proportion of commercial structures with sprinklers
*Response*: the response times to fires: 50th and 90th percentile response times (this can be difficult as it may include all of responses to urban, rural and remote fires); and containment of fires – containment to room of origin

Outcome measures suggested by the productivity commission include: the fire death rate, the fire injury rate losses from structure fires.

The results for these measures are only available on a state by state basis, so there is no ability to compare the three fire services within Victoria. Due to differences in fire service structure and geographic make-up between states, the results are also not readily usable for inter-state comparison.

Discussion
Financial/probity accountability
MFB and CFA both report well in terms of financial accountability. The financial reports follow Australian accounting standards (AIFRS) and the Victorian Financial Management Act 1994, which is to be used by government and semi-government authorities. The reports show the operating surpluses, assets, liabilities and capital and indicate that both services are in good financial positions. However, the size of the operating surpluses can be questioned: is accountability to the community best served by generating profits in the range of tens of millions of dollars, or in operating more efficiently so that the cost to the community is minimised? These are questions that this research did not attempt to answer, but which are clearly an avenue for future research.

The CFA report does not show the cost by category of brigade. There is no way of separating out the costs of the fully professional urban brigades, the part professional and part volunteer brigades, and the fully volunteer brigades, so there is no point of comparison with the MFB for the urban brigades. Equally, there are no data which can point to the difficulty or otherwise of equipping small rural, local brigades through donations rather than through insurance levies or other more certain funding.
Other performance issues around CFA relate to the inability to measure the intrinsic worth of the volunteer services (Carvalho et al 2006), and the economic value of the opportunity costs for volunteers engaged in firefighting and the loss to their employers. None of this is taken into consideration in the CFA annual report, or in the Productivity Commission’s performance measures.

The financial accountability of the firefighting division of DSE cannot be evaluated, as it is not separated out from the financial results for the remainder of the department.

Operational/performance accountability
Table 2 demonstrates that there is little comparative operational performance measurement information available for the three services, and indeed very little on which outside stakeholders can judge the services’ level of accountability to the public. In addition, and this is a significant omission, there is no apparent relationship between the aims and strategic vision of the services and the measures which are reported. Further, the results of the major Bushfire Enquiry listed many recommendations for operational improvement for all three services, but there are no performance measures related to achieving those recommendations.

MFB and CFA operate similarly in the metropolitan areas of Melbourne, but outside the metropolitan area CFA has obligations and structures which are quite different. It could logically be expected that CFA would need multiple performance measures: performance measures similar to those of MFB for its metropolitan and other urban services, and that CFA would have additional measures relating to its volunteer service, its community work, and its bushfire capability. In reality, MFB and CFA have very few similar performance measures. The MFB uses a number of the Productivity Commission KPIs, but the CFA uses very few of them. The number of turnouts, and calls or incidents by type, are the only two measures which are common to both MFB and CFA. Even these are not really comparable, as there is no scaling of the measures (e.g. calls per 1000 households/businesses) and no sense of which CFA callouts are urban and which are for bushfires. There only other area of commonality lies in the Human Resources area around reports of work related injury claims.

The DSE report shows the organisation to have little in common with either MFB or CFA, as it is a government department which has a brief related to fires on public land, not fires in general. Operationally, there is some overlap with CFA in that both organisations fight fires in rural and remote bushland. During the Australian summer fire period, CFA volunteers are often called into forest fires in national parks to work with DSE fire-fighters. It is thus surprising that there is so little commonality of measurement when comparing DSE and CFA.
Table 2 Summary of operational performance indicators

<table>
<thead>
<tr>
<th>MFB</th>
<th>CFA</th>
<th>DSE</th>
<th>PC KPIs</th>
<th>Carvalho et al (Scotland and England)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of turnouts</td>
<td>Number of turnouts</td>
<td>Total fire incidents</td>
<td>Average number of accidental dwelling fires per 10,000 pop.</td>
<td></td>
</tr>
<tr>
<td>Calls by type</td>
<td>Total incidents by category</td>
<td>Number of fires</td>
<td>Total incidents by category</td>
<td></td>
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<tr>
<td>Days of total fire bans</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Response times in minutes (90th percentile)</td>
<td>Response times to structure fires (50th and 90th percentiles)</td>
<td>(a) % of responses meeting national target</td>
<td>(b) for rural, % meeting local target</td>
<td></td>
</tr>
<tr>
<td>Number of calls by local government area</td>
<td></td>
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<tr>
<td>Fire containment to room origin</td>
<td></td>
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<tr>
<td>Emergency medical response</td>
<td>Not applicable – being investigated as a service</td>
<td>Not applicable</td>
<td></td>
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<tr>
<td>Fire containment to room of origin</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Preventable fire fatalities</td>
<td>Fire death rate per million people, Fire injury rate per 100,000 people</td>
<td>Fire casualties per 10,000 people</td>
<td></td>
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<tr>
<td>HR: work cover claims</td>
<td>HR work cover claims</td>
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<tr>
<td>% of rider shifts lost due to sickness and absence</td>
<td>% working time lost for other staff</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Community fireguard meetings</td>
<td>% households with operational smoke alarm</td>
<td></td>
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<tr>
<td>Community fireguard groups</td>
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<tr>
<td>Hectares burned</td>
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<tr>
<td>Fuel reduction hectares burned</td>
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<tr>
<td>Expenditure per 1000 people</td>
<td></td>
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<tr>
<td>Property loss from structure fire, $ per person</td>
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<tr>
<td>Service delivery</td>
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<tr>
<td>Corporate health</td>
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</table>
Overall, these results demonstrate there is no coherent framework for the reporting to stakeholders of operational performance measures for fire services in the state of Victoria. Stakeholders cannot judge from the annual reports how the fire services are performing in comparative terms. Whilst the MFB reports allow stakeholders to judge how that service is performing relative to Australia-wide indicators, provided by the Productivity Commission, there is no linkage to the goals or objectives that the fire service sets for itself. For both main fire services, there are no reported linkages of outcomes to strategic goals, and indeed the strategic goals themselves are not reported. The reports fail to deliver on accountability to stakeholders outside the fire services.

In order to better understand how the CFA operates, and determine if there are performance measures which are not reported externally, interviews were undertaken with station officers in a large rural town. For operational purposes, there are in fact a number of internal performance indicators which alert staff to problems, largely automatically generated through the computerised fire reporting process. For example, the response times to turnout and response times to incident are automatically recorded for all staffed stations (category one stations). If the time exceeds the defined service delivery standard, the report cannot be continued until the reason for the slower time is recorded. The response time – in terms of time to incident – is more difficult to monitor as the distances to incidents in rural areas may be significantly more than in urban (MFB) areas. The CFA does not report on fires by local government region as there is little or no alignment between CFA brigades and local government areas. The CFA reports internally on callouts by brigade or station, by region and in total across the state, but this is not in the annual report. Interestingly, the statistics are available in the CFA house magazine provided to volunteers and other CFA members. The CFA fire reports for structure fires do report on fire containment to room of origin, but summary statistics are not in the annual report. Preventable fire fatalities, and fire deaths and injuries, are also reported on the fire reports and captured by head office, but are not in the annual report. The station officers suggested that some of the unreported statistics may reflect poorly on some volunteer firefighters, and to ensure that volunteer numbers are maintained, the poor statistics are hidden from public scrutiny.

**Conclusions**

This paper demonstrates that a lack of performance measures which are reported to various stakeholders reduces the accountability of some public services. Carvalho et al (2006) note that there are appropriate and meaningful performance measures for fire services in the UK, but surprisingly these have not been borrowed for all of the Victorian services. It is surprising because Victoria has borrowed many other aspects of NPM which were first introduced into the UK, such as Compulsory Competitive Tendering and Best Value, both of which have been mandated by the state for use local government.

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5 For staffed CFA stations, the required time to turnout is 90 seconds. For volunteer brigades, the required time to turnout is four minutes.
Probity accountability, the lowest level of accountability designed to report on the use of funds (Kloot and Martin 2001) is well reported in the financial statements of the annual reports for the MFB and the CFA, but not so for DSE. Some of the narrative reports, taken together with the financial reports, indicate that there is some focus on process accountability. However, the results are disappointing in that despite the rhetoric of accountability, performance measures which would allow external stakeholders to determine the level of performance accountability (Kloot and Martin 2001) of each organisation have not been pursued.

The DSE service is most disappointing in that many major fires are under the control of DSE, and DSE also has the responsibility for preparing national park and crown land areas to prevent fires and/or minimise fire damage. Indicators relating to these responsibilities are largely unreported, despite the high percentage of fires which occur on Crown land and national parks. One estimate for 2006/2007 is that 16% of the state was affected by fires, and the majority of these fires occurred under DSE jurisdiction. DSE called in CFA professional and volunteer crews to assist in fighting the fires.

The CFA is a largely volunteer organisation, with 58,000 volunteers alongside the few hundred permanent firefighters, and some measures of accountability for their many hours of unpaid training and service would better inform the general public of the value of their contributions and the true cost of firefighting operations. Indeed, when the issue of payment for volunteers for the time they spend fighting fires is raised, it is usually concluded that payment is not possible due to the high cost involved. One estimate has put the cost of replacing volunteers as high as $500 million, which would still leave much of the state exposed to risk (Nguyen and Catalano 2007).

It would be useful to develop measures which separate out volunteer and professional costs, and rural and urban services. Carvalho et al (2006) point to multiple measures used in Scotland which allows separation of the performance of rural services and urban services, and these measures would appear to be useful for the CFA, which has both urban and rural service components.

The MFB measures and reports on its operations over a broader range of KPIs, some of them those suggested by the National Productivity Commission. The MFB reports go further in satisfying the needs for accountability to diverse stakeholders than do the other two services.

References
DSE [Department of Sustainability and Environment] (2007) Victoria in Future
Egan C (2006) 20,000 fewer CFA fighters since Ash Wednesday fires The Sunday Age Nov 26 p 2.
Kloot L and J Martin (2001) Local government accountability: Explaining differences Accounting, accountability and performance Vol 7 No 1 pp 51-72
Appendix 1

Areas of Victoria covered by CFA/MFB

Boundaries between MFB and CFA in Outer Melbourne